

**BUILDING THE
FUTURE-READY
ECONOMY**

Kickoff TIG Digitalisation Cybersecurity

Rix Groenboom (Groningen)

Dennis-Kenji Kipker (Bremen)

18 – Jan - 2022



Partners in the Alliance:



Welcome !

- Engaged University
- Main conference: Postponed until May 2022
- We will run a series of workshops in the main time
 - Tuesday 18 Jan: 17:00 – 18:30
 - Tuesday 15 Feb: 17:00 – 18:30
 - Tuesday 15 March: 17:00 – 18:30
 - Tuesday 19 April: 17:00 – 18:30
 - Tuesday 17 May: 17:00 – 18:30



Agenda

- Review Technical interest Groups (Rix)
- Introduction of the members on this meeting (All)
- Detailed presentation by Bremen (Dennis)
- Discussion (All)

Members of this TIG

- Bernard Butler (WIT) Bernard.Butler@WaltonInstitute.i
- Daniel Martins (WIT) Daniel.Martins@WaltonInstitute.ie
- Dennis-Kenji Kipker (HSB) dennis-kenji.kipker@hs-bremen.de
- Evren Eren (HSB) evren.eren@hs-bremen.de
- Hans Bodenstaf (Hanze) j.h.bodenstaff@pl.hanze.nl
- Jessica Hof (Hanze) j.p.hof@pl.hanze.nl
- João Paulo (IPB) jpa@ipb.pt
- Nouredine Boujnah (WIT) Nouredine.Boujnah@WaltonInstitute.ie
- Richard Sethmann (HSB) sethmann@hs-bremen.de
- Rix Groenboom (Hanze) h.m.groenboom@pl.hanze.nl
- Tiago Pedrosa (IPB) pedrosa@ipb.pt

Theme 1: Machine Learning, Data Science, AI,
Mathematical Modeling, Simulations

Theme 2: Cybersecurity, Cybersafety,
Information Security, Law



Theme 3: Robotics, Collaborative and Mobile
Robotics, Sensor Signals, Internet of Things,
Connectivity, Localisation

Theme 4: Cyber-physical systems, Multi-
agent systems, Industrial Applications,
Digital Twin

Theme 5: Human Machine Interaction, Virtual
Reality, Augmented Reality, Interfaces

Theme 6: Educational, Learning Technologies,
Games, Gamification, Animations, Visual,
Design

Theme 1: Machine Learning, Data Science, AI, Mathematical Modeling, Simulations.

datasets simulated acoustics
prediction models
personalisation
adaptive systems
prediction
iot application

Theme 2: Cybersecurity, Cybersafety, Information Security, Law.

data protection iot architecture
anonimization ethics
security security by design
human factors
intrusion
intrusion simulation



Theme 3: Robotics, Collaborative and Mobile Robotics, Sensor Signals, Internet of Things, Connectivity, Localisation.

robot localization data pipelines
iot developments low-cost iot protocols
path planning collision detection
edge computing
virtual robots interaction dynamics
robotics cooperation multi-robots
wireless sensor networks software
mobile robot navigation
machine learning models

Theme 4: Cyber-physical systems, Multi-agent systems, Industrial Applications, Digital twin

collaborative environment
auralization realistic simulation
interface practices
interaction modality
distributed ai training
embedded systems behavior change
asset administrat shell
what-if simulation
industry app development

Theme 5: Human Machine Interaction, Virtual Reality, Augmented Reality, Interfaces

identification sustainability industry 50
haptic devices usability
perception ux training
interaction modality
algorithms user experience ergonomics
computational geometry navigation

Theme 6: Educational, Learning Technologies, Games, Gamification, Animations, Visual Design

collaborative teaching
intelligent tutoring
learning analytics remote teaching
remote labs effectiveness
behavior change virtual labs
challenge based learning
vr-ar game mechanics student motivation
training metacognitive blended learning
game theory
inverted classroom



Application Domains

- Education;
- Health;
- Smart Grid;
- Government;
- Agriculture;
- Energy Transition;
- Logistics;
- Construction;
- Smart Cities;
- Medical Applications;
- Tourism;
- Retail;
- Automotive Industry;
- Agri-food;
- Smart Cities;
- SMEs /
Entrepreneurship.

Ambitions for the coming year

- Bring sub-theme groups together:
 - Start sharing knowledge/interests/projects;
 - Identify new opportunities to work together (new project development);
 - Tie themes to application domains.
- Staff exchange;
- Set up educational collaboration (e.g. shared programs);
- Support sub-themes where possible:
 - Business development;
 - Access to funding.

Thank you!

**BUILDING THE
FUTURE-READY
ECONOMY**



Visit us:
www.europeanengageduniversity.eu



Follow us:
[@EuropeanENGAGEDuniversity](https://twitter.com/EuropeanENGAGEDuniversity)

Join the conversation:
[#EUengageduniversity](https://twitter.com/EuropeanENGAGEDuniversity)